

## THE TROPICAL DISTURBANCE OF AUGUST 26-31, 1934

By W. R. STEVENS

[Weather Bureau, Washington, October 1934]

Disturbed conditions were first observed in connection with this storm on the morning of August 26, when two vessels in the north-central Gulf of Mexico reported squalls, and the wind velocity at Port Eads, La., was 28 m. p. h. from the east. During the night of August 25, 5.50 inches of rain fell at Port Eads. By the night of the 26th there had been an increase in wind velocity and a decrease in pressure, with a movement of the disturbed condition toward the west-northwest. However, no definite center had developed at this time; but storm warnings were issued for the Texas coast between Port Arthur and Port O'Connor. By the morning of the 27th a definite center had developed and was located about 50 miles east of Galveston, the lowest reported pressure being 29.46 inches, and the highest wind velocity 70 m. p. h. (estimated). A maximum wind velocity of 30 m. p. h. from the east-northeast was recorded at Port Arthur during the night of August 26. Storm warnings were changed to hurricane warnings from Port Arthur to Galveston at 8:30 a. m. E. S. T. on August 27, and hurricane warnings were issued west of Galveston to Freeport at 2:45 p. m. Caution was also advised against possibility of dangerous gales west of Freeport to Matagorda. It was apparent at this time that the disturbance was turn-

ing more to the west or west-southwest. After the 27th, the storm moved south-southwestward, and crossed the Mexican coast a short distance north of Tampico during the night of August 31. Such a course of a tropical disturbance along the Texas coast is unprecedented.

The lowest pressure reported at any coastal station was 29.62 inches at Galveston on the 27th. Approximately the same pressure was recorded by independent observers at Freeport during the early morning of the 28th.

The highest wind velocities recorded at coastal stations during the storm were as follows: Port Arthur, 34 m. p. h.; Galveston, 42 m. p. h.; and Freeport, 50-60 m. p. h. (estimated).

The lowest pressure and highest wind velocity were reported by the steamship *Simon von Utrecht* on the afternoon of August 28, when the vessel was about 75 miles south-southwest of Galveston: Pressure, 29.34 inches; wind velocity, 80 m. p. h. (estimated).

There was no serious damage along the Texas coast. After receipt of the storm warnings on August 26, beaches and low sections were evacuated, and precautions taken against property damage in the danger zone indicated in the warnings. No loss of life was reported on the coast or at sea.

## BIBLIOGRAPHY

C. FITZHUGH TALMAN, in Charge of Library

## RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

## Commonwealth solar observatory

Memoir. Canberra. 1934. no. 3. Measurements of atmospheric ozone made at the Commonwealth solar observatory, Mount Stromlo, Canberra, during the years 1929 to 1932, by A. J. Higgs, B. Sc. Canberra. March 1934. 29 p. figs., plates. 31 cm.

## Leighly, John Barger

Marquesan meteorology. Notes on the meteorologic observations made in the Marquesas islands by the Pacific entomo-

logical survey during the years 1929-1932, by John B. Leighly, Berkeley, California, University of California press, 1933. p. 147-172 incl. illus. (map), tables, diagrs. 26 cm. (University of California publications in geography. v. 6, no. 4.)

## United States. Coast &amp; geodetic survey

Alaska magnetic tables and magnetic charts for 1930, by Daniel L. Hazard, chief magnetician, Division of terrestrial magnetism and seismology. Washington, U. S. Govt. printing office, 1934. 35 p. incl. tables. 4 fold. charts. 23 cm. (Serial no. 570.) At head of title: U. S. Department of commerce. Daniel C. Roper, secretary. Coast and geodetic survey. R. S. Patton, director. . . . Lithographed.

## SOLAR OBSERVATIONS

SOLAR RADIATION MEASUREMENTS DURING  
SEPTEMBER 1934

By IRVING F. HAND, Assistant in Solar Radiation Investigations

For a description of instruments employed and their exposures, the reader is referred to the January 1932 REVIEW, page 26.

Table 1 shows that solar radiation intensities averaged above normal for September at all three Weather Bureau stations.

Table 2, on the other hand, shows a deficiency in the amount of total solar and sky radiation received on a

horizontal surface at all stations except Fairbanks, Alaska.

Table 3 shows lower turbidity values and less water content of the atmosphere than were recorded during the summer months.

Polarization measurements obtained on 6 days at Washington give a mean of 54 percent, with a maximum of 60 percent on the 17th. At Madison measurements made on 7 days give a mean of 57 percent with a maximum of 63 percent on the 17th. The values at Washington are close to the September normals, while those at Madison are somewhat below normal.